

## MATERIAL SAFETY DATA SHEET

**Product Trade Name:** SteelSeal® 50

**Revision Date:** 26-Apr-2013

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Statement of Hazardous Nature** Non-Hazardous according to the criteria of NOHSC, Non-Dangerous Goods according to the criteria of ADG.

**Manufacturer/Supplier** Halliburton/Baroid Australia Pty. Ltd.  
15 Marriott Road  
Jandakot  
WA 6164  
Australia

ACN Number: 009 000 775  
Telephone Number: 61 (08) 9455 8300  
Fax Number: 61 (08) 9455 5300

**Product Emergency Telephone**

Australia: 08-64244950  
Papua New Guinea: 05 1 281 575 5000  
New Zealand: 06-7559274

**Fire, Police & Ambulance - Emergency Telephone**

Australia: 000  
Papua New Guinea: 000  
New Zealand: 111

### Identification of Substances or Preparation

**Product Trade Name:** SteelSeal® 50  
**Synonyms:** None  
**Chemical Family:** Graphite  
**UN Number:** None  
**Dangerous Goods Class:** None  
**Subsidiary Risk:** None  
**Hazchem Code:** None Allocated  
**Poisons Schedule:** None Allocated  
**Application:** Loss Circulation Material

**Prepared By** Chemical Compliance  
Telephone: 1-580-251-4335  
e-mail: fdunexchem@halliburton.com

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

| Substances              | CAS Number | PERCENT   | Australia<br>NOHSC | New Zealand<br>WES | ACGIH TLV-TWA  |
|-------------------------|------------|-----------|--------------------|--------------------|----------------|
| Calcined petroleum coke | 64743-05-1 | 60 - 100% | Not applicable     | Not applicable     | Not applicable |

## Non-Hazardous Substance to Total of 100%

### 3. HAZARDS IDENTIFICATION

|                            |  |
|----------------------------|--|
| <b>Hazard Overview</b>     | May cause eye and respiratory irritation. May cause delayed injury to lungs. Airborne dust may be explosive. |
| <b>Risk Phrases</b>        | None   |
| <b>HSNO Classification</b> | Non-hazardous  |

### 4. FIRST AID MEASURES

|                           |  |
|---------------------------|--|
| <b>Inhalation</b>         | If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.                     |
| <b>Skin</b>               | Wash with soap and water. Get medical attention if irritation persists.  |
| <b>Eyes</b>               | In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.                  |
| <b>Ingestion</b>          | Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person. |
| <b>Notes to Physician</b> | Not Applicable   |

### 5. FIRE FIGHTING MEASURES

|  |                                  |
|--|----------------------------------|
| <b>Suitable Extinguishing Media</b>                                  | All standard fire fighting media |
| <b>Extinguishing media which must not be used for safety reasons</b> | None known.                      |
| <b>Special Exposure Hazards</b>                                      | Not applicable.                  |
| <b>Special Protective Equipment for Fire-Fighters</b>                | Not applicable.                  |

### 6. ACCIDENTAL RELEASE MEASURES

|   |  |
|---|--|
| <b>Personal Precautionary Measures</b>      | Use appropriate protective equipment. Avoid creating and breathing dust. |
| <b>Environmental Precautionary Measures</b> | None known.  |
| <b>Procedure for Cleaning / Absorption</b>  | Scoop up and remove.   |

### 7. HANDLING AND STORAGE

|                             |   |
|-----------------------------|---|
| <b>Handling Precautions</b> | Avoid creating or inhaling dust. Avoid dust accumulations. Wet activated carbon removes oxygen from air causing a severe hazard to workers inside carbon vessels and enclosed or confined spaces. Before entering such an area, sampling and dark procedures for low oxygen levels should be taken to ensure ample oxygen availability. |
| <b>Storage Information</b>  | Store away from oxidizers. Store in a dry location. Keep from heat, sparks, and open flames. Product has a shelf life of 60 months.   |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

|                               |   |
|-------------------------------|---|
| <b>Engineering Controls</b>   | A well ventilated area to control dust levels.  |
| <b>Respiratory Protection</b> | If engineering controls and work practices cannot keep exposure below occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should be performed by an Industrial Hygienist or other qualified professional.<br><br>Not normally needed. But if significant exposures are possible then the following respirator is recommended:<br>Dust/mist respirator. (N95, P2/P3) |
| <b>Hand Protection</b>        | Normal work gloves.   |
| <b>Skin Protection</b>        | Normal work coveralls.  |
| <b>Eye Protection</b>         | Wear safety glasses or goggles to protect against exposure.   |
| <b>Other Precautions</b>      | None known.   |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|  |                |
|--|----------------|
| <b>Physical State:</b>                                       | Granules       |
| <b>Color:</b>  | Dark gray      |
| <b>Odor:</b>   | Odorless       |
| <b>pH:</b>   | Not Determined |
| <b>Specific Gravity @ 20 C (Water=1):</b>                    | 1.75           |
| <b>Density @ 20 C (kg/l):</b>                                | Not Determined |
| <b>Bulk Density @ 20 C (kg/m<sup>3</sup>):</b>               | Not Determined |
| <b>Boiling Point/Range (C):</b>                              | 4200           |
| <b>Freezing Point/Range (C):</b>                             | Not Determined |
| <b>Pour Point/Range (C):</b>                                 | Not Determined |
| <b>Flash Point/Range (C):</b>                                | > 356          |
| <b>Flash Point Method:</b>                                   | Not Determined |
| <b>Autoignition Temperature (C):</b>                         | Not Determined |
| <b>Flammability Limits in Air - Lower (g/m<sup>3</sup>):</b> | Not Determined |
| <b>Flammability Limits in Air - Lower (%):</b>               | Not Determined |
| <b>Flammability Limits in Air - Upper (g/m<sup>3</sup>):</b> | Not Determined |
| <b>Flammability Limits in Air - Upper (%):</b>               | Not Determined |
| <b>Vapor Pressure @ 20 C (mmHg):</b>                         | 1              |
| <b>Vapor Density (Air=1):</b>                                | 0.4            |
| <b>Percent Volatiles:</b>                                    | Not Determined |
| <b>Evaporation Rate (Butyl Acetate=1):</b>                   | Not Determined |
| <b>Solubility in Water (g/100ml):</b>                        | Insoluble      |
| <b>Solubility in Solvents (g/100ml):</b>                     | Not Determined |
| <b>VOCs (g/l):</b>   | Not Determined |
| <b>Viscosity, Dynamic @ 20 C (centipoise):</b>               | Not Determined |
| <b>Viscosity, Kinematic @ 20 C (centistokes):</b>            | Not Determined |
| <b>Partition Coefficient/n-Octanol/Water:</b>                | Not Determined |
| <b>Molecular Weight (g/mole):</b>                            | Not Determined |
| <b>Decomposition Temperature (C):</b>                        | Not Determined |

## 10. STABILITY AND REACTIVITY

|                                  |                |
|----------------------------------|----------------|
| <b>Stability Data:</b>           | Stable         |
| <b>Hazardous Polymerization:</b> | Will Not Occur |

|   |                                     |
|---|-------------------------------------|
| <b>Conditions to Avoid</b>                  | None known.                         |
| <b>Incompatibility (Materials to Avoid)</b> | Strong acids. Strong alkalis.       |
| <b>Hazardous Decomposition Products</b>     | Carbon monoxide and carbon dioxide. |
| <b>Additional Guidelines</b>                | Not Applicable                      |

## 11. TOXICOLOGICAL INFORMATION

**Principle Route of Exposure** Eye or skin contact, inhalation.

### Symptoms related to exposure

#### **Inhalation**

May cause mild respiratory irritation.

#### **Skin Contact**

May cause mild skin irritation.

#### **Eye Contact**

May cause eye irritation.

#### **Ingestion**

May cause mild gastric distress.

#### **Aggravated Medical Conditions**

Skin disorders.

#### **Chronic Effects/Carcinogenicity**

Prolonged, excessive exposure to dust may cause pneumoconiosis, a lung disease caused by inhaling dust particles less than 0.5 micrometers into the lungs.

#### **Other Information**

None known.

#### **Toxicity Tests**

**Oral Toxicity:** Not determined

**Dermal Toxicity:** Not determined

**Inhalation Toxicity:** Not determined

**Primary Irritation Effect:** Not determined

**Carcinogenicity** Not determined

**Genotoxicity:** Not determined

**Reproductive / Developmental Toxicity:** Not determined

## 12. ECOLOGICAL INFORMATION

**Mobility (Water/Soil/Air)** Not determined

**Persistence/Degradability** Not determined

**Bio-accumulation** Not determined

### **Ecotoxicological Information**

**Acute Fish Toxicity:** Not determined

**Acute Crustaceans Toxicity:** Not determined

**Acute Algae Toxicity:** Not determined

**Chemical Fate Information** Not determined

**Other Information** Not applicable

### 13. DISPOSAL CONSIDERATIONS

**Disposal Method** Bury in a licensed landfill according to federal, state, and local regulations.

**Contaminated Packaging** Follow all applicable national or local regulations.

### 14. TRANSPORT INFORMATION

#### Land Transportation

**ADR**  
Not restricted

#### Air Transportation

**ICAO/IATA**  
Not restricted

#### Sea Transportation

**IMDG**  
Not restricted

#### Other Transportation Information

**Labels:** None

### 15. REGULATORY INFORMATION

#### Chemical Inventories

|   |  |
|---|--|
| <b>Australian AICS Inventory</b>          | All components listed on inventory or are exempt.          |
| <b>New Zealand Inventory of Chemicals</b> | All components listed on inventory or are exempt.          |
| <b>US TSCA Inventory</b>                  | All components listed on inventory or are exempt.          |
| <b>EINECS Inventory</b>                   | This product, and all its components, complies with EINECS |

**Classification** Not Classified

**Risk Phrases** None

**Safety Phrases** None

### 16. OTHER INFORMATION

**The following sections have been revised since the last issue of this SDS**

Not applicable

## Contact

### Australian Poisons Information Centre

24 Hour Service: - 13 11 26

Police or Fire Brigade: - 000 (exchange): - 1100

### New Zealand National Poisons Centre

0800 764 766

### Additional Information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

### Disclaimer Statement

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**\*\*\*END OF MSDS\*\*\***